CONTENTS

Session B-1: New Developments in Water Treatment Technology	
Chairmen: Irving Moch Jr. (USA), Kenji Fujita (Japan)	
Membrane applications in raw water treatment with and without reverse osmosis desalination	
by B. Ericsson and B. Hallmans (Sweden)	3
Organic waste water treatment by activated sludge process using integrated type membrane separation	
by O. Futamura, M. Katoh, and K. Takeuchi (Japan)	7
Treatment of wastewater and sludge by a catalytic wet oxidation process by Y. Harada and K. Yamasaki (Japan)	:7
Mechanical vapour compression to treat oil field produced water by A. Koren and N. Nadav (Israel)	1
Waste water recycling technology using a rotary disk module by N. Ohkuma, M. Ohnishi, and Y. Okuno (Japan)4	9
New pretreatment systems using membrane separation technology by M. Oinuma, S. Sawada, and K. Yabe (Japan)	9
KACST mobile drinking water treatment plant for research by A.I. Alabdula'aly and A.A. Chammem (Saudi Arabia)	1
Potable water quality improvement for the city of Amsterdam by H.A. van den Berkmortel and A. Graveland (The Netherlands)	3
Process options for nitrogen and phosphorus removal in domestic wastewater by B. Ericsson (Sweden)	15
Effects of biological treatment conditions on permeate flux of UF membrane in a membrane/activated-sludge wastewater treatment system	0
by K. Ishiguro, K. Imai and S. Sawada (Japan)11	9
Production of heavy oil from sewage sludge by direct thermochemical liquefaction by S. Itoh, A. Suzuki, T. Nakamura, and S. Yokoyama (Japan)	7
Potabilization of desalinated water at Madinat Yanbu Al-Sinaiyah by A.D. Khawaji and JM. Wie (Saudi Arabia)	5

Treatment of wastewater from phenolic resin process by pervaporation by M. Kondo and H. Sato (Japan)
Water treatment by pitch-based activated carbon fiber by N. Shindo, Y. Otani, G. Inoue, and K. Kawazoe (Japan)
Treatment of wheat starch waste water by a membrane combined two phase methane fermentation system by C. Yanagi, M. Sato and Y. Takahara (Japan)
Session B-2: Environmental Protection by Water Technology Chairmen: Krishnamurthi Rao (India), Tomonori Matuo (Japan)
Drainage water reuse or disposal, Jeddah, Saudi Arabia by O.S. Abu-Rizaiza (Saudi Arabia) and H.Z. Sarikaya (Turkey)173
Control of the nutrient pollution discharge from the Vistula River Basin in Poland by B. Ericsson and B. Hallmans (Sweden)
Field test on a methane fermentation treatment system incorporating a membrane module for municipal sewage by K. Kiriyama, Y. Tanaka, and I. Mori (Japan)
An advanced purification system combining ozonation and BAC, developed by The Bureau of Waterworks, Tokyo Metropolitan Government
by S. Muramoto and J. Nishino (Japan)
and T. Fujioka (Japan)
Management and construction of a major zero discharge water supply and treatment scheme at Mount Piper Power Station – Australia by P. Wong, P. Docker, E. Gabbrielli, and P. Wade (Australia)
Treatment and disposal of saline wastewater from coal mines in Poland by B. Ericsson and B. Hallmans (Sweden)
Simultaneous removal of DO and TOC in ultrapure water by using UV rays by T. Saitoh, H. Nagai, M. Imai, K. Nakajima, and M. Tujimura (Japan)249
Session B-3: Reuse of Wastewater Chairmen: Neil M. Cline (USA), Motoyuki Suzuki (Japan)
Trends in domestic waste water treatment in Sweden by B. Ericsson and B. Hallmans (Sweden)

Water Factory 21 – The logical sequence
by W.R. Mills, Jr. and I.C. Watson (USA)265
A trial of high performance anaerobic treatment on wastewater from a kraft pulp mill
by K. Minami (Japan)273
A novel new water source for Madras Fertilisers Ltd. by A.G. Turner (Scotland), P.S. Neelakantan, and N. Gajendran (India)
Advanced water treatment (AWT) facility at Madras Refineries Ltd., Madras – sewage water reused
by J.C. Thomas (India)
Use of reverse osmosis in chlor alkali plant by K. Gurumoorthy and T. Swaminathan (India)303
Water recycling systems in Tokyo by T. Udagawa (Japan)
Ultrafiltration membrane technology for regeneration of building wastewater for reuse by T. Yokomizo (Japan)
Recycling of sewage treatment water by ozone by T. Honda and Y. Kugawa (Japan)
Recycling of waste water from buildings by application of membrane by T. Okada and O. Oba (Japan)
Session B-4: Water Technology for Industry Chairmen: Emilio Gabbrielli (Australia), Masanao Hirai (Japan)
Treatment of concentrated cyanide wastewater by M. Futakawa, H. Takahashi, G. Inoue, and T. Fujioka (Japan)345
The development of membrane technology for wastewater treatment in textile industry in China
by J. Hao and Q. Zhao (China)
The use of hollow fiber filters to improve condensate purification efficiency in thermal power plants
by H. Koushiro and Y. Kubo (Japan)361
Application of concentrator on the treatment of industrial waste water by M. Miura and K. Harada (Japan)
Adaptation of the Multi-Effect Distillation (MED) process to yield high purity distillate for utilities, refineries and chemical industry
by A. Ophir and A. Gendel (Israel)

Advanced reverse osmosis membrane modules for novel ultrapure water
production process by T. Ikeda, H. Muragishi, R. Bairinji, and T. Uemura (Japan)39
What every reverse osmosis water system manager should know by D.L. Kronmiller (USA)
Process performance comparison of membrane introduced anaerobic digestion using food industry waste water
by Y. Yushina and J. Hasegawa (Japan)413
Session B-5: Water Resources Chairmen: O. Kris Buros (USA), Eiichi Mikami (Japan)
Water scarcity – The challenge of the future by M.A.K. Al-Sofi (Saudi Arabia)
Extending water supplies in water short areas by O.K. Buros and R.D.G. Pyne (USA)
The Virgin Islands desalination experience by A. Bruno-Vega and K.S. Thomas (Virgin Islands)
Groundwater as a feedwater source for membrane treatment plants: Hydrogeologic controls on water quality variation with time by T.M. Missimer (USA)
Water for peace master plan of the Jordan river system by M. Murakami (Japan)
Economics of brackish and desalination water reuse for irrigation by Z. Shimron (Israel)
Disaster (hurricane) preparedness. Public (water) utility by G. Sheppard (USA)
Solar photovoltaic electrodialysis desalination for brackish water in remote areas by N. Ishimaru (Japan)
Desalination in India – Experience and future prospects by C.N. Raghupathi and T. Swaminathan (India)
Golf course construction plans and water quality preservation by E. Shirahama and M. Kiyozuka (Japan)